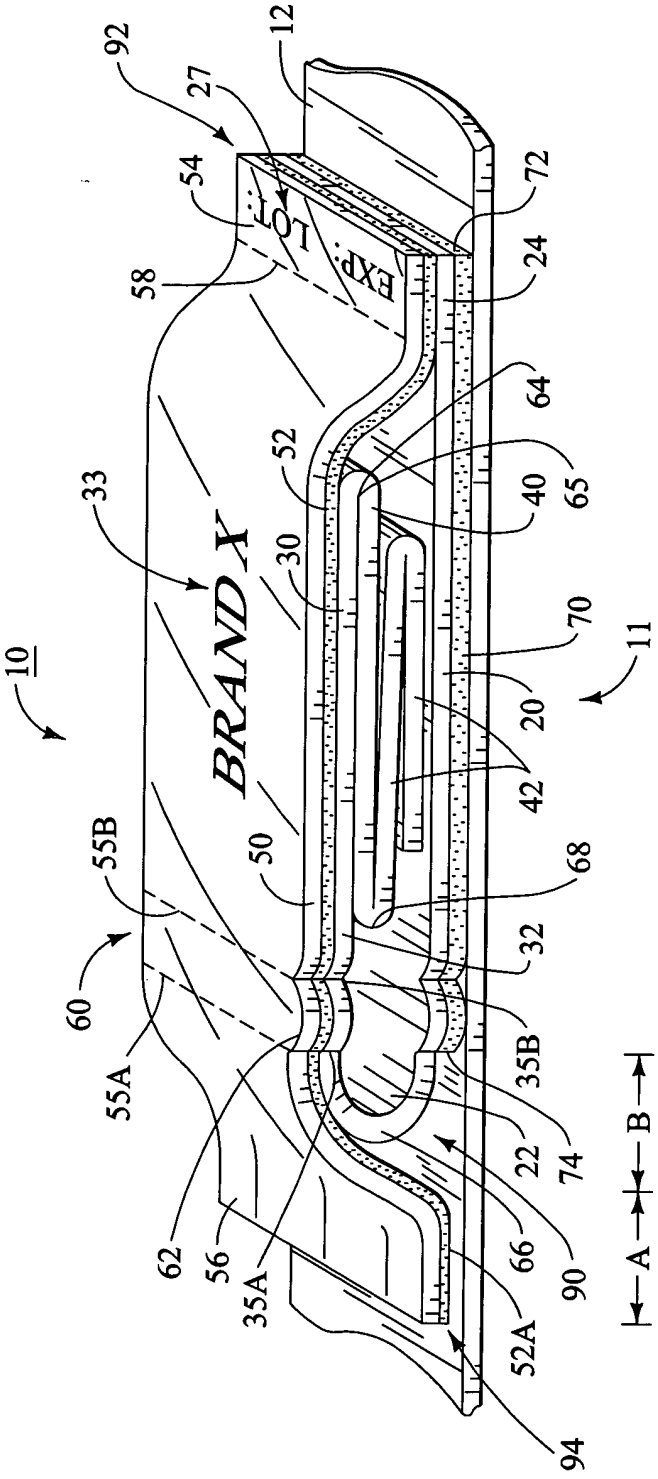

FIG. 1
PRIOR ART

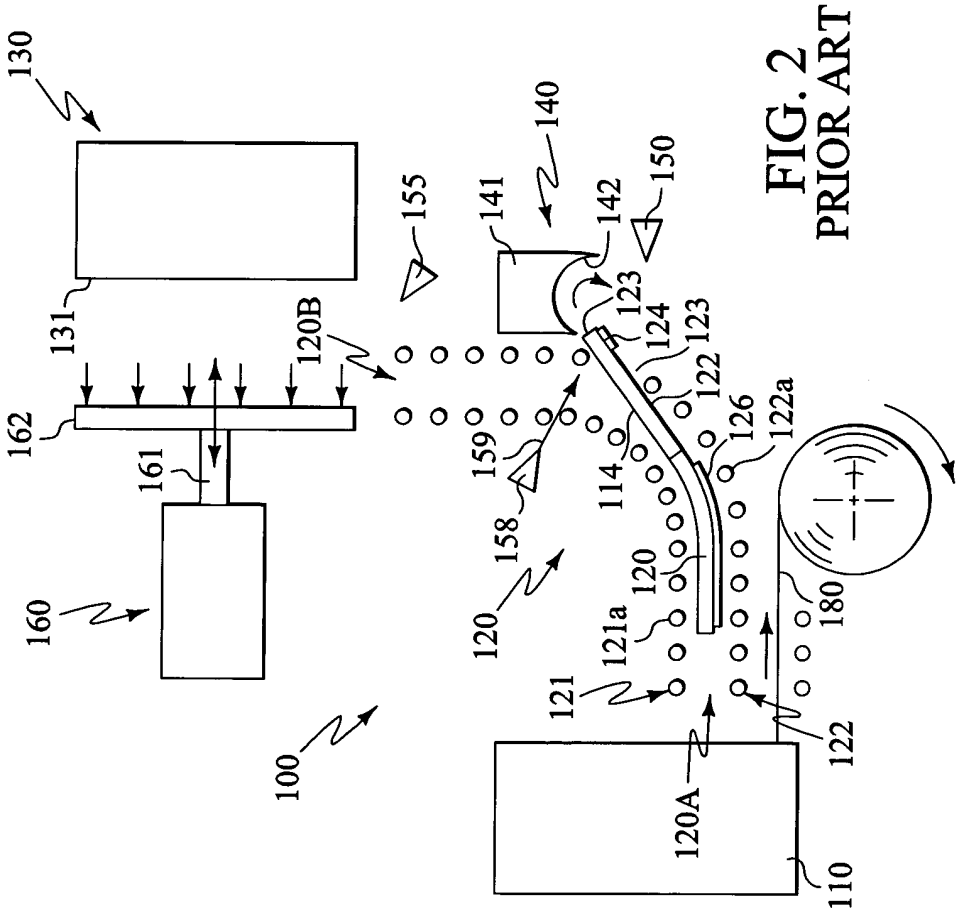

FIG. 2
PRIOR ART

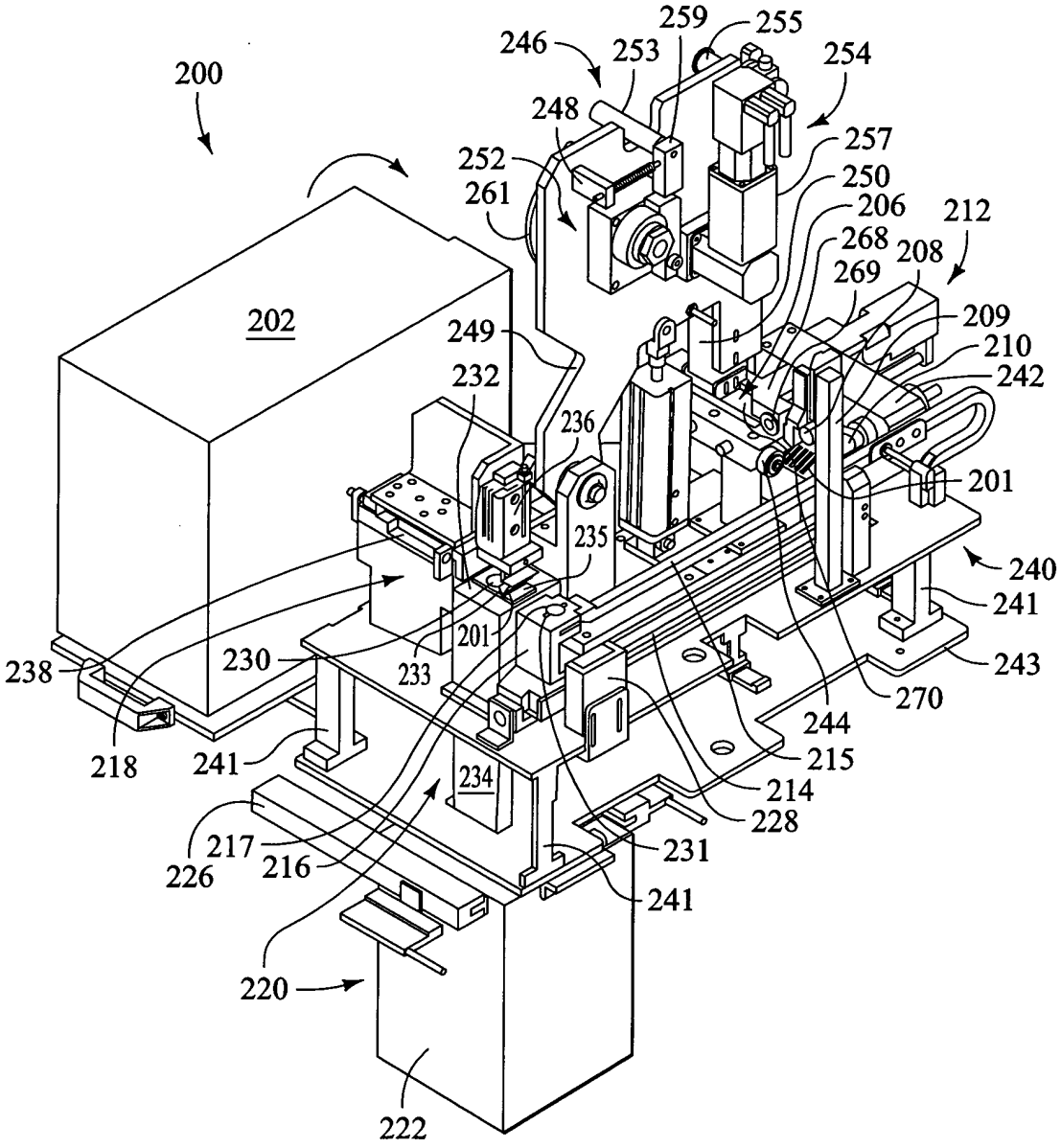
200
202
246
253
259
255
254
248
257
252
261
250
206
212
268
208
269
209
249
210
232
242
236
201
235
240
241
238
230
233
201
243
270
218
241
244
215
234
214
228
217
231
226
216
241
220
222

FIG. 3A

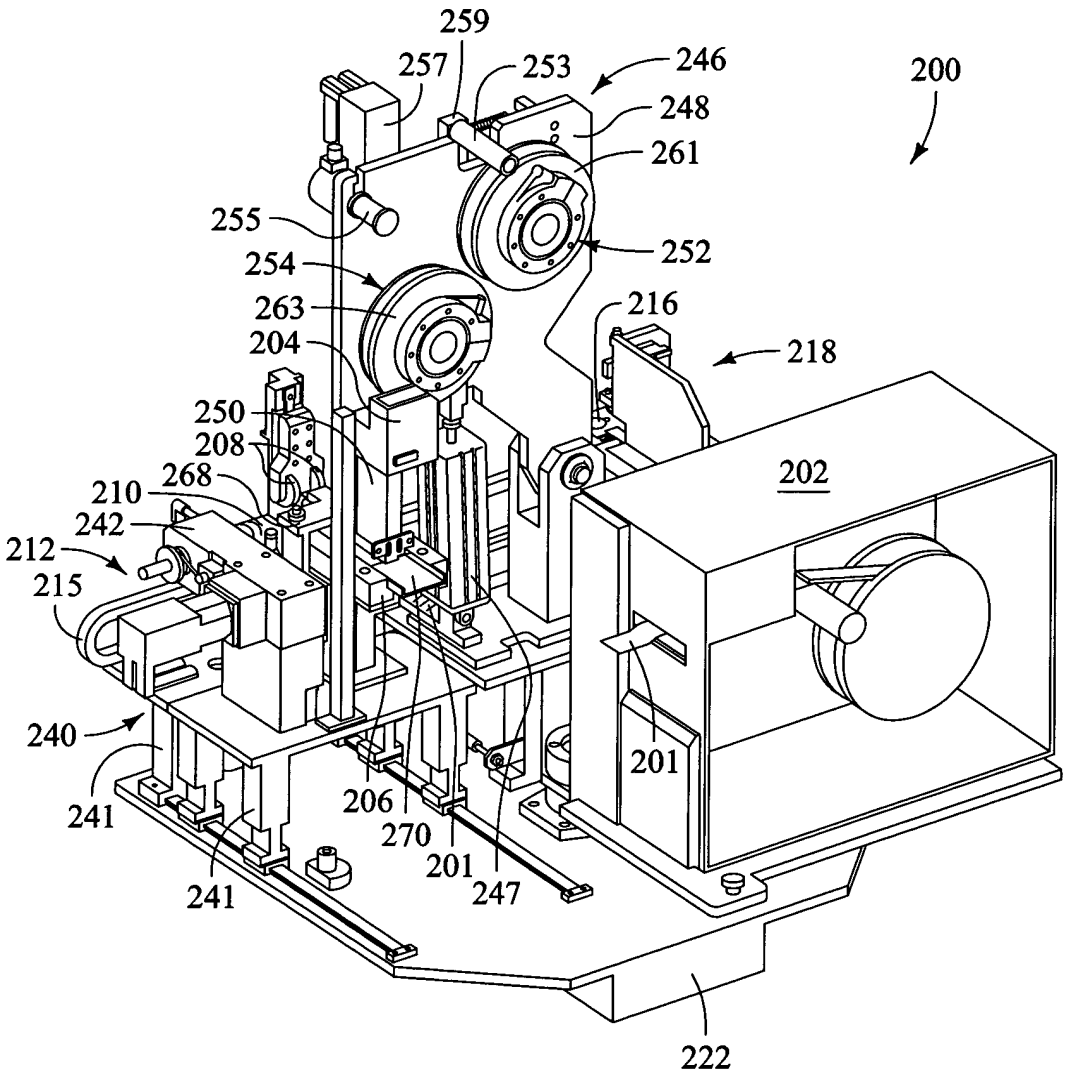
259
257
253
246
200
248
261
255
252
254
263
216
204
218
250
208
202
268
210
242
212
215
240
201
241
206
270
201
247
241
222

FIG. 3B

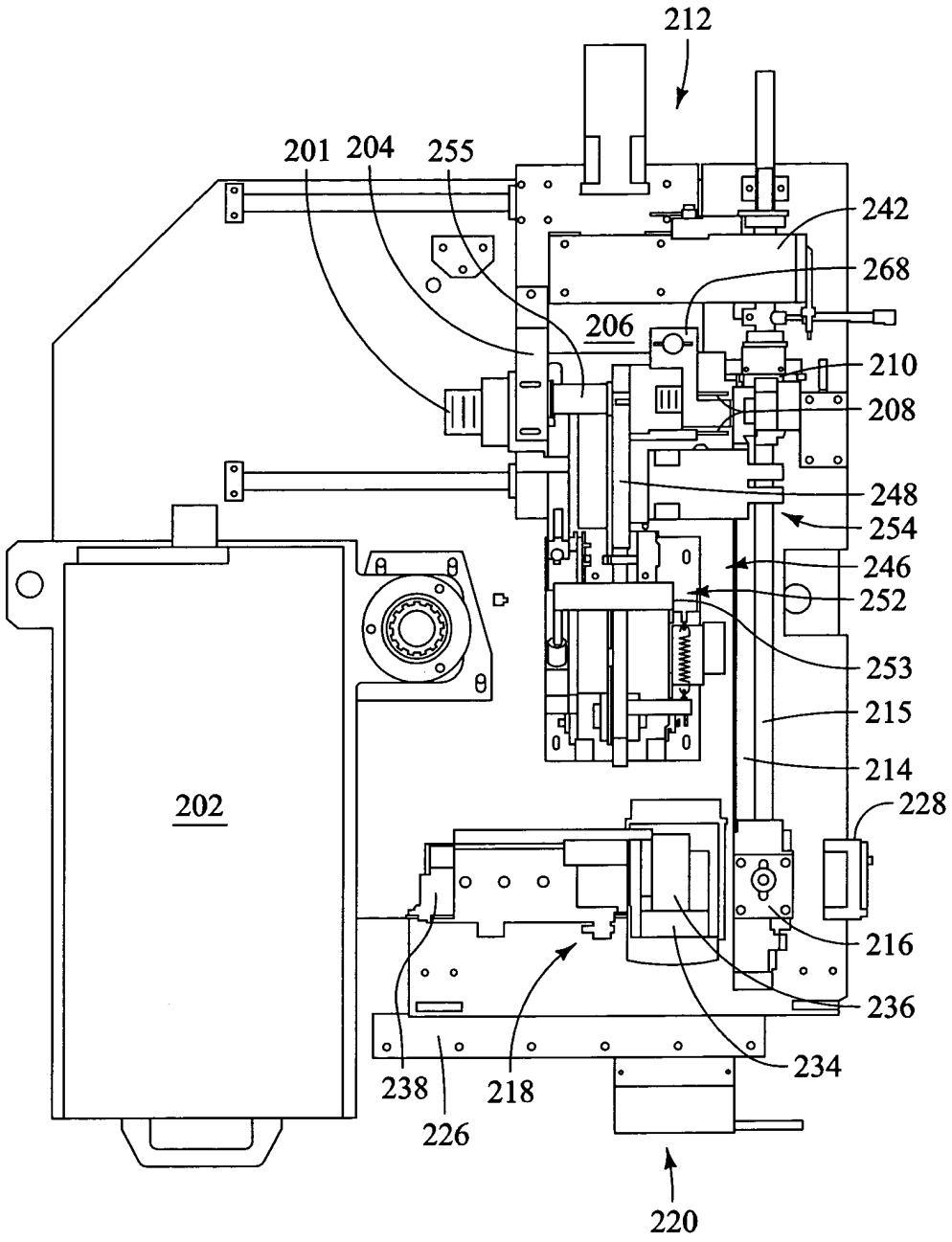
212
201
204
255
242
268
206
210
208
248
254
246
252
253
215
214
228
202
216
236
234
238
218
226
220

FIG. 4

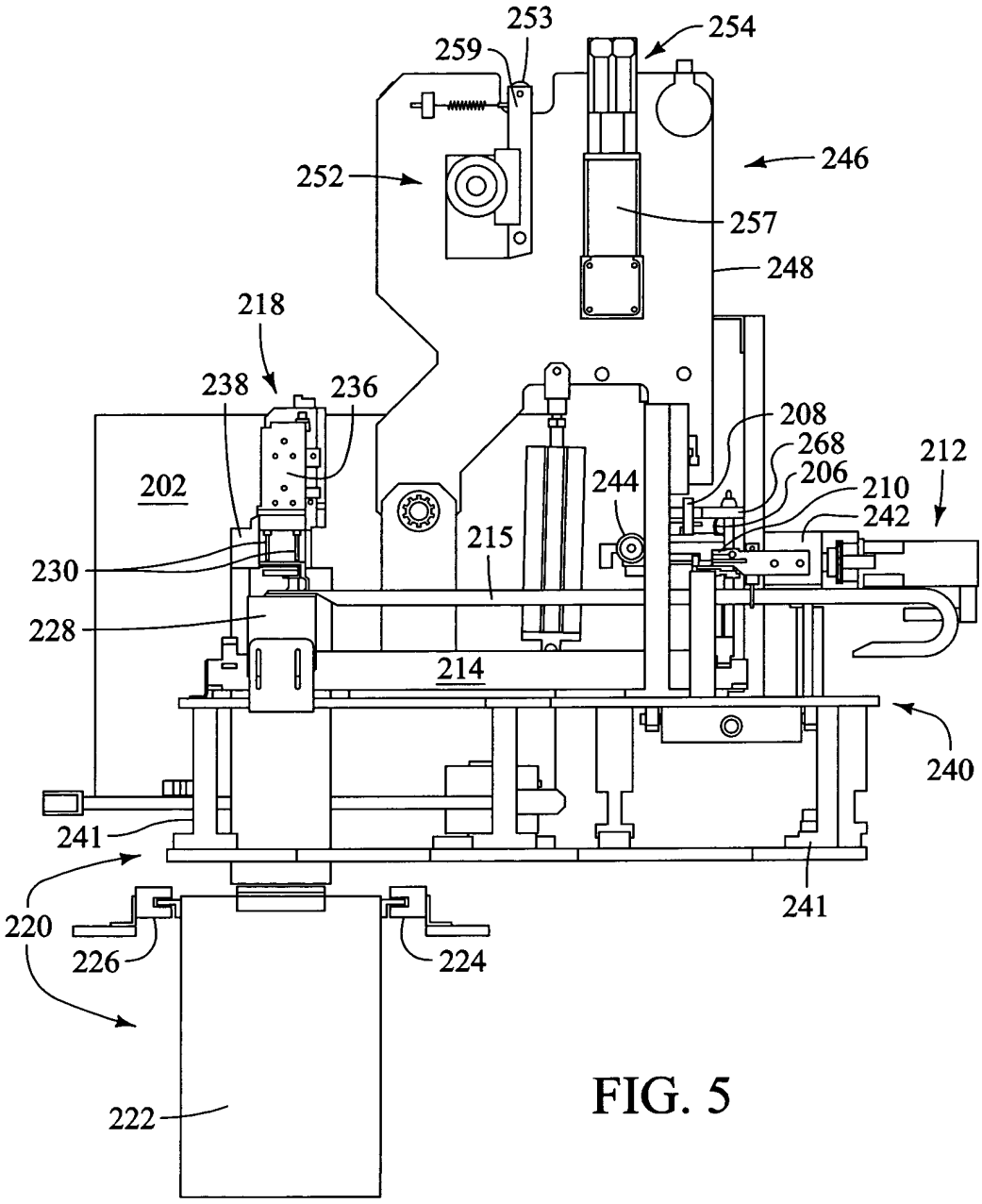
253
254
259
246
252
257
248
218
238
236
208
268
206
210
242
212
202
244
215
230
228
214
240
241
241
220
226
224
222

FIG. 5

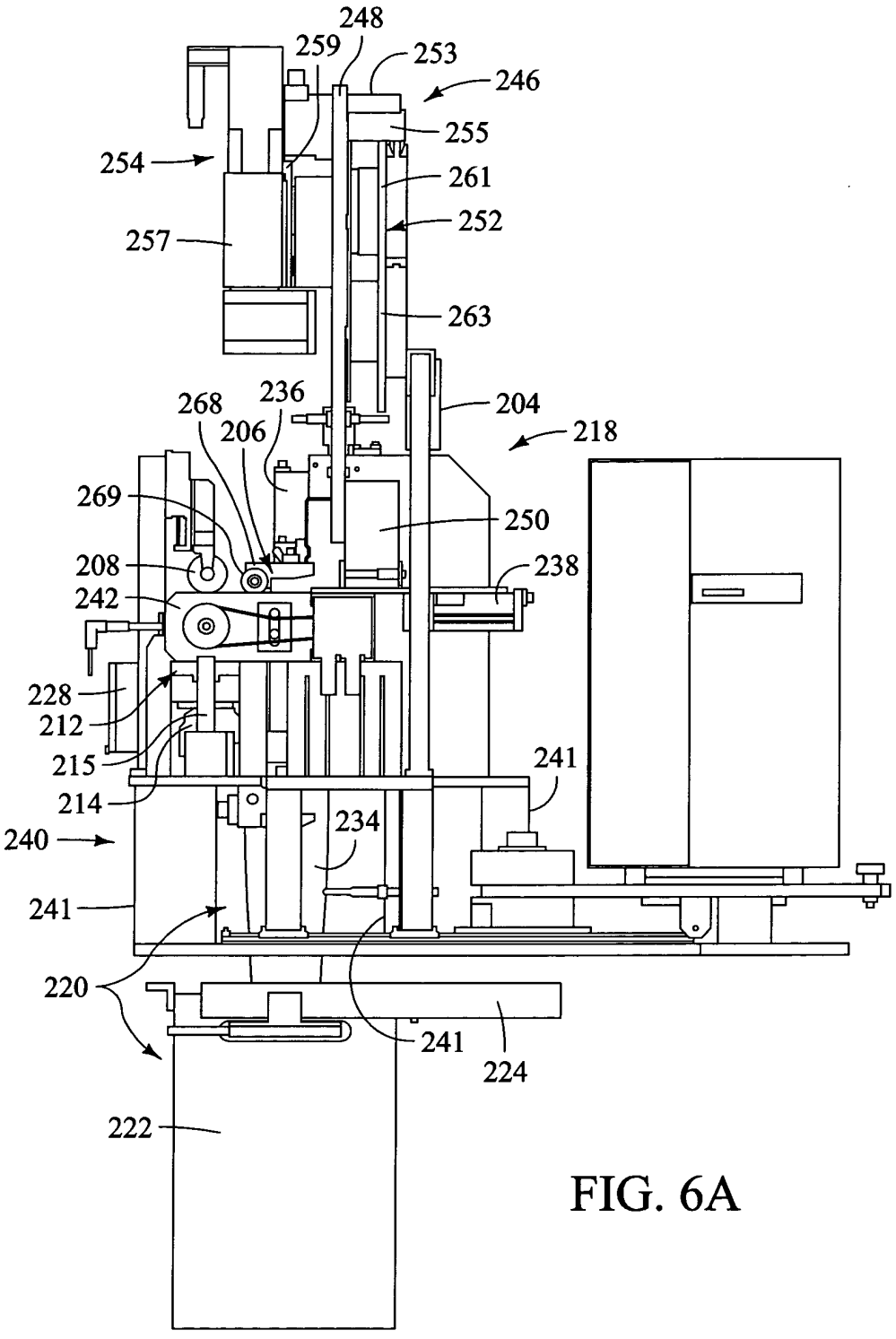
248
259
253
246
255
254
261
252
257
263
268
236
204
206
218
269
250
208
238
242
228
212
215
241
214
234
240
241
220
241
224
222

FIG. 6A

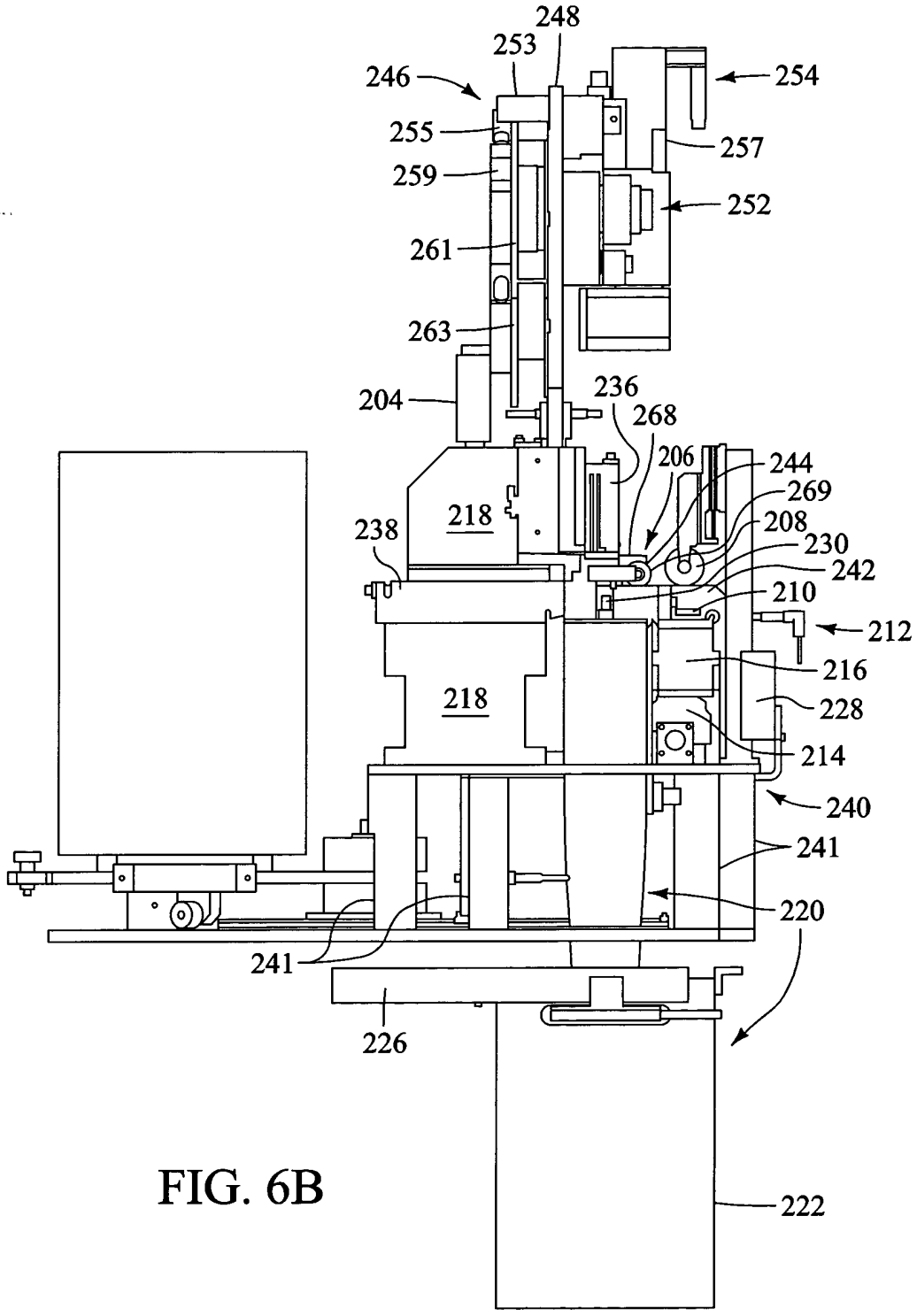
248
253
246
254
255
257
259
252
261
263
204
236
268
206
244
269
218
208
238
230
242
210
212
216
218
228
214
240
241
220
241
226
222

FIG. 6B

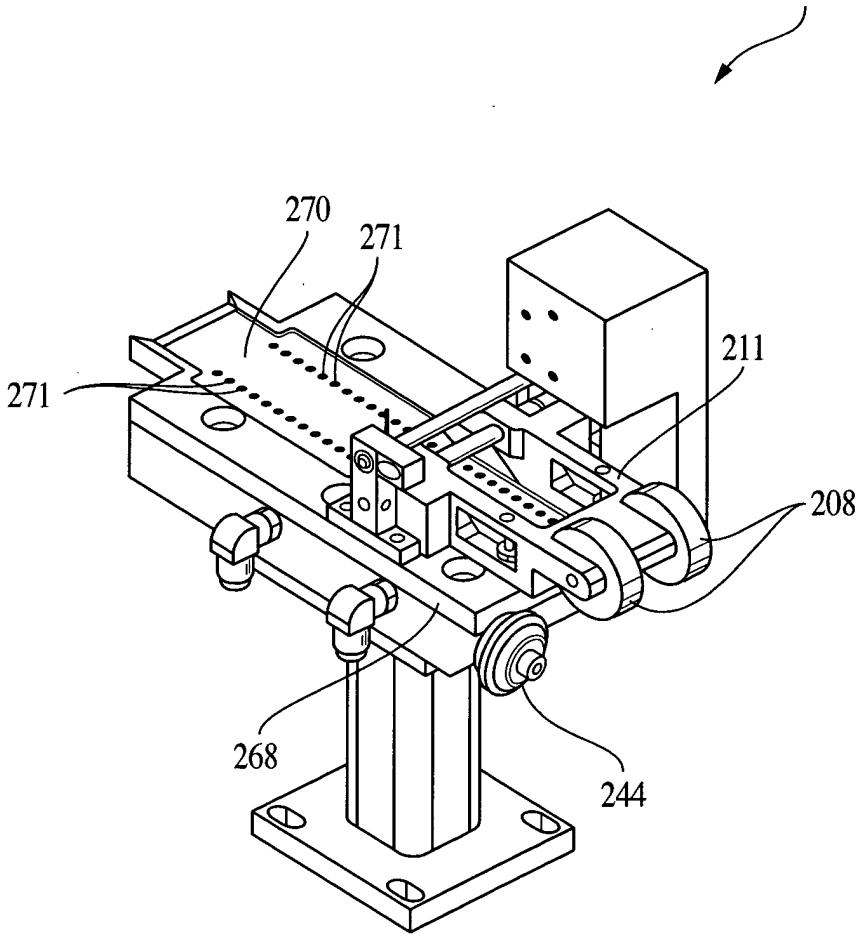

FIG. 7

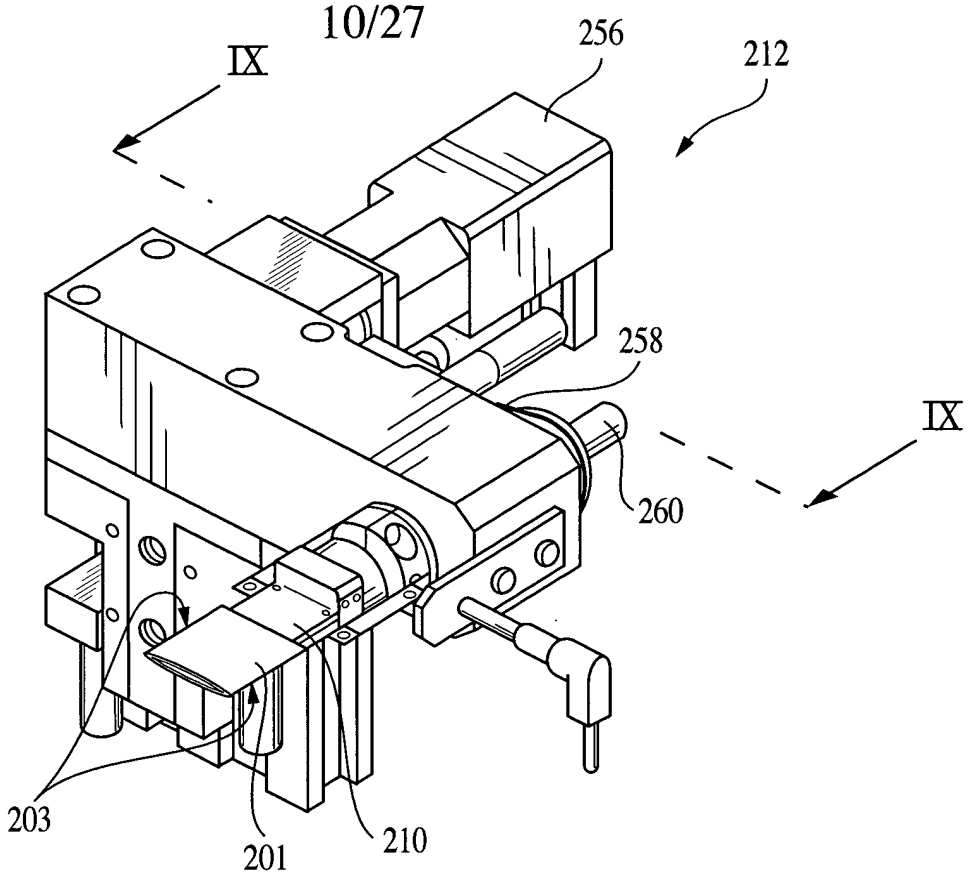

FIG. 8

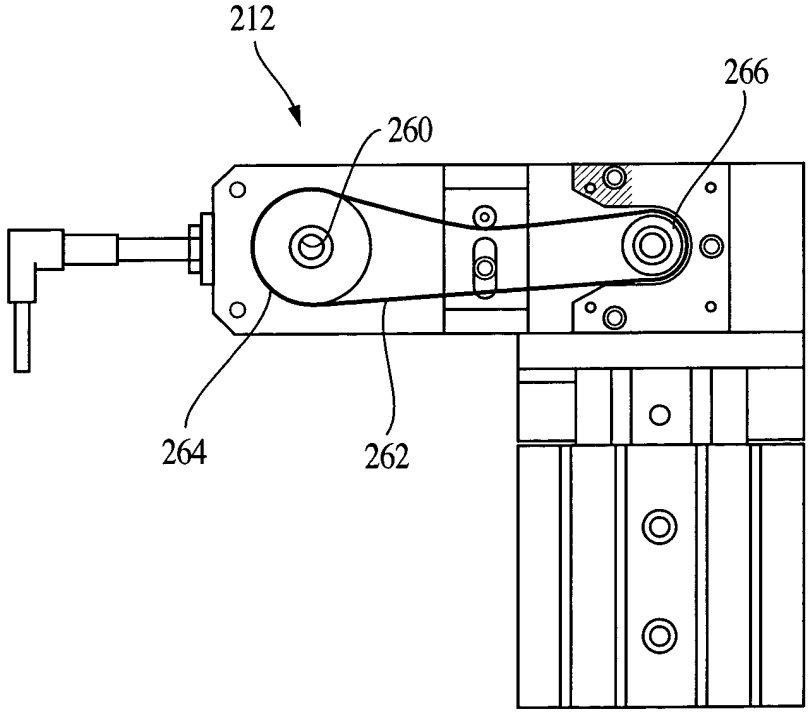

FIG. 9

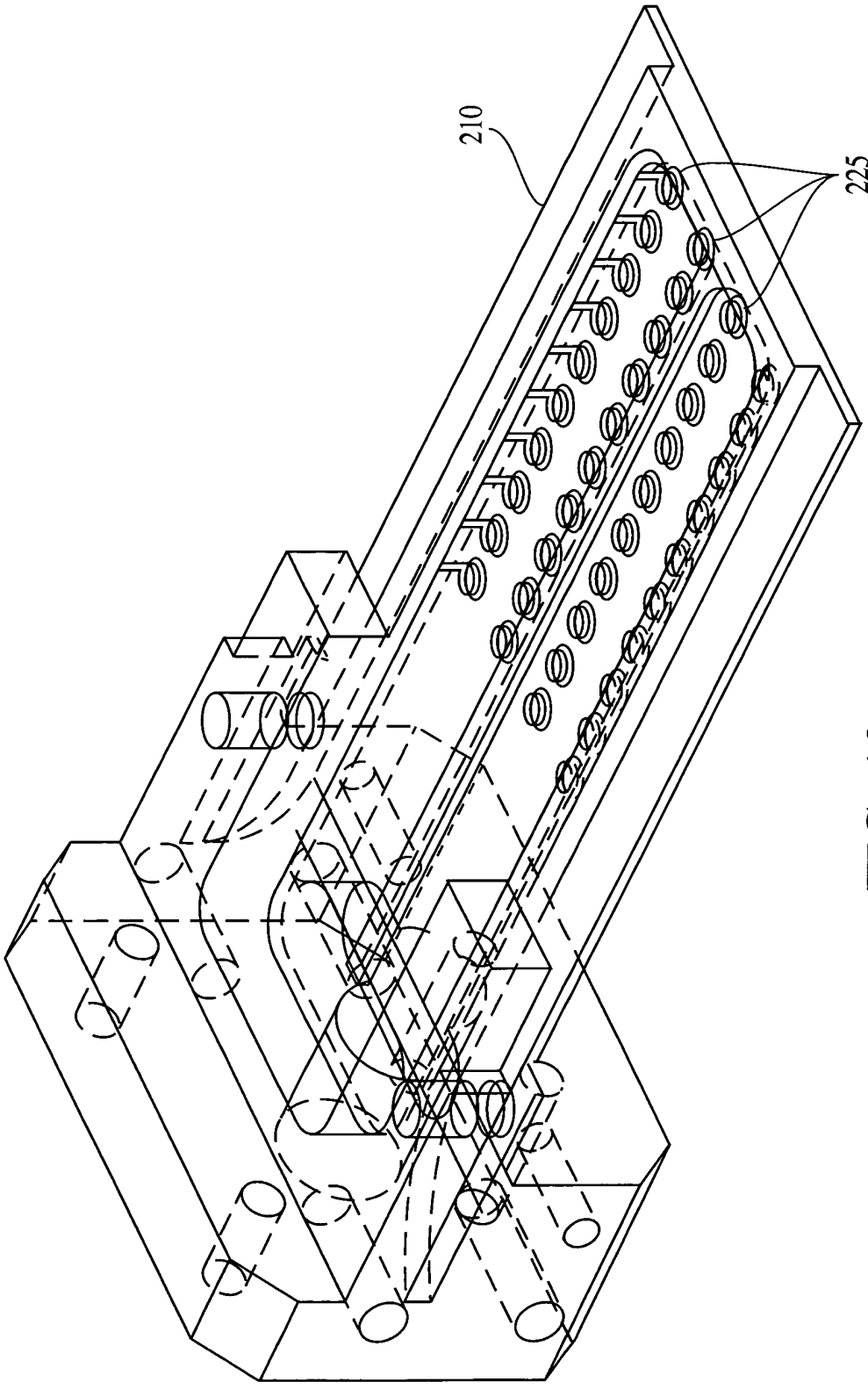

FIG. 10

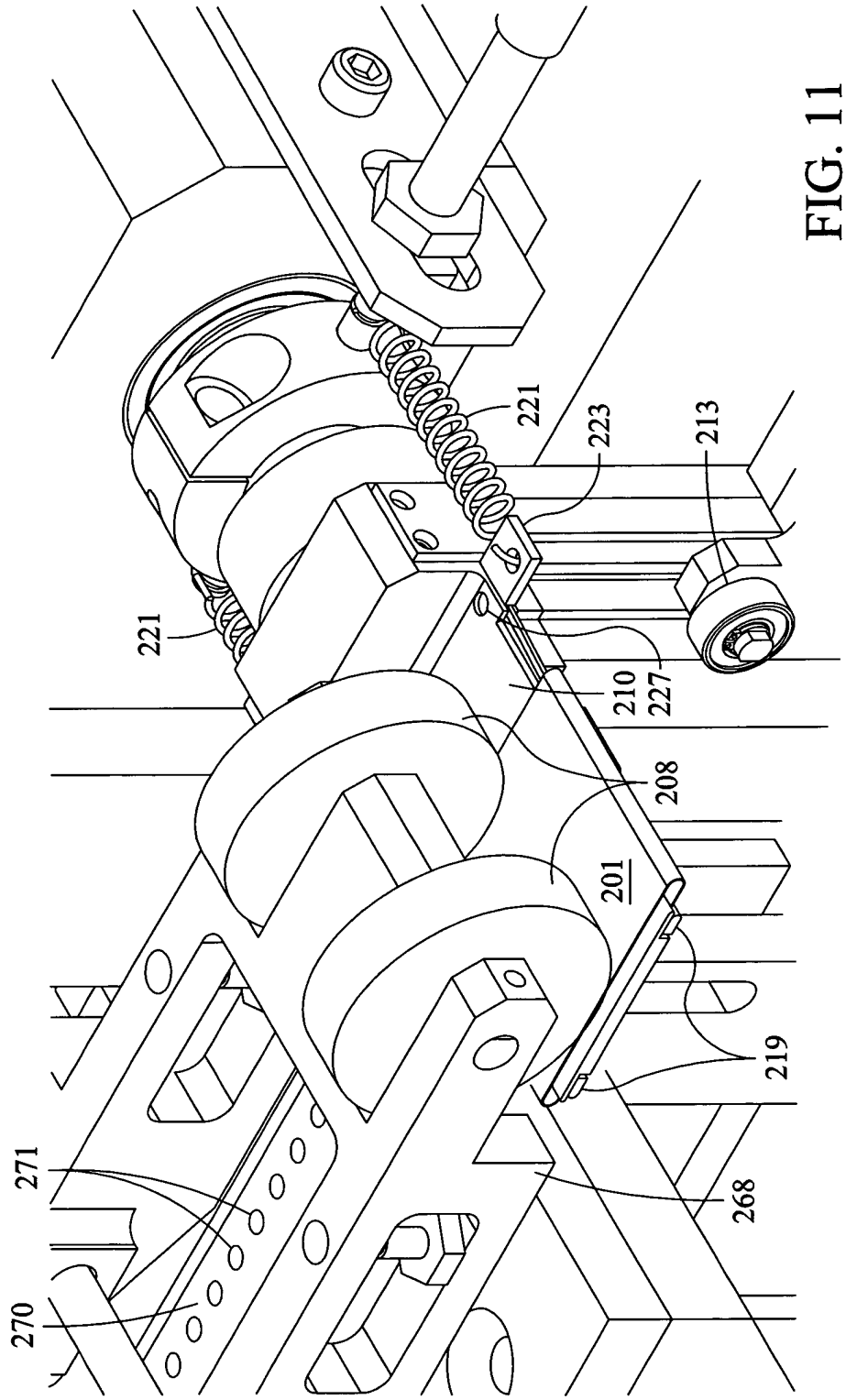

FIG. 11

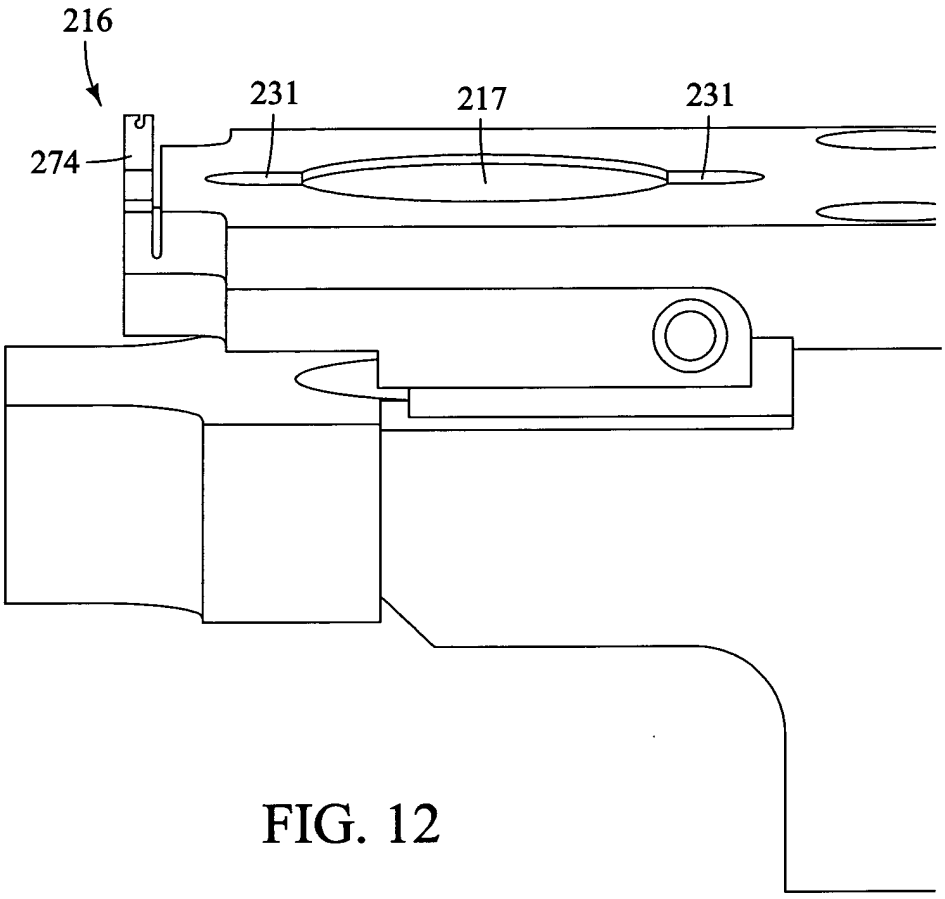

FIG. 12

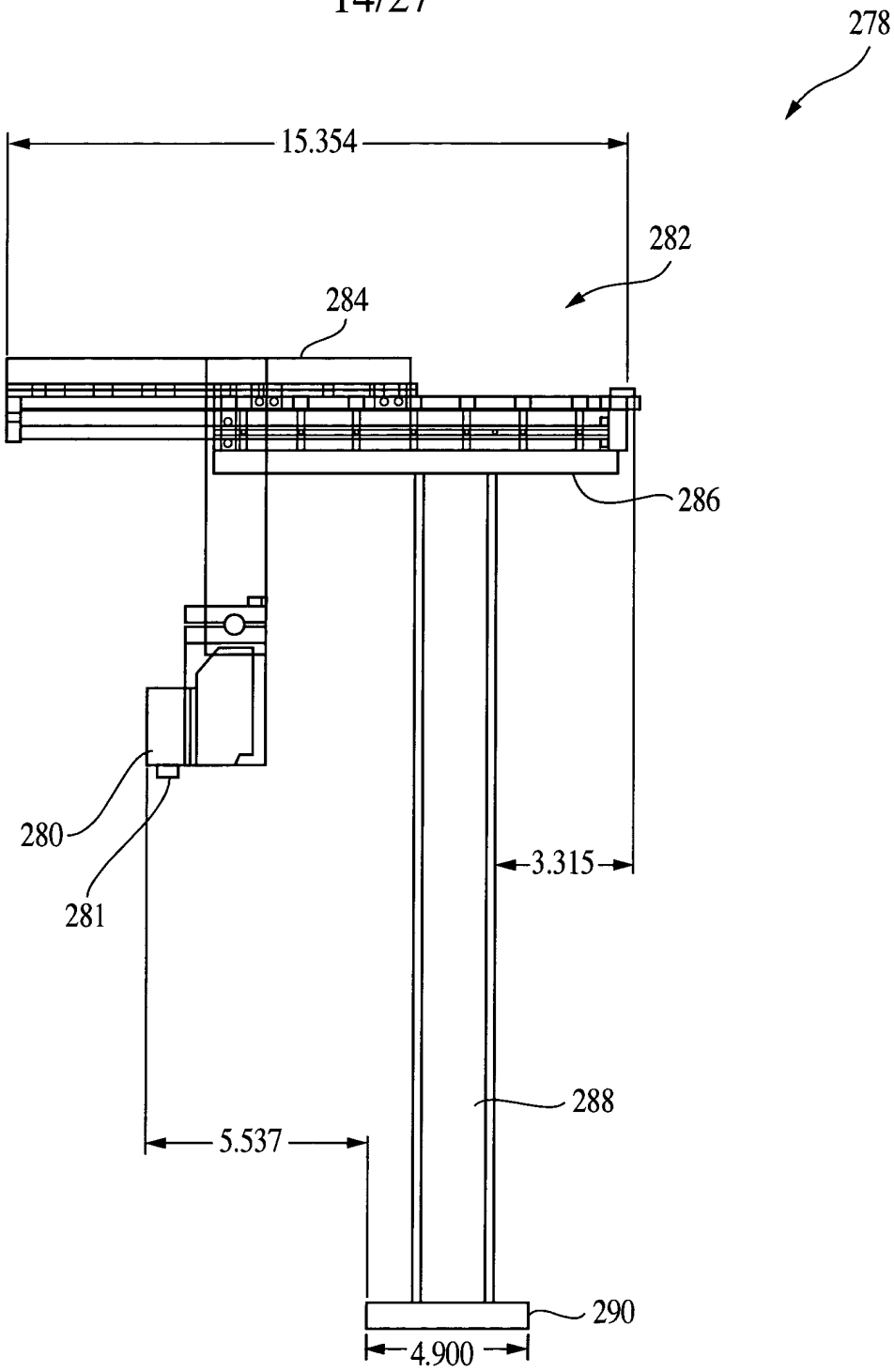

FIG. 13A

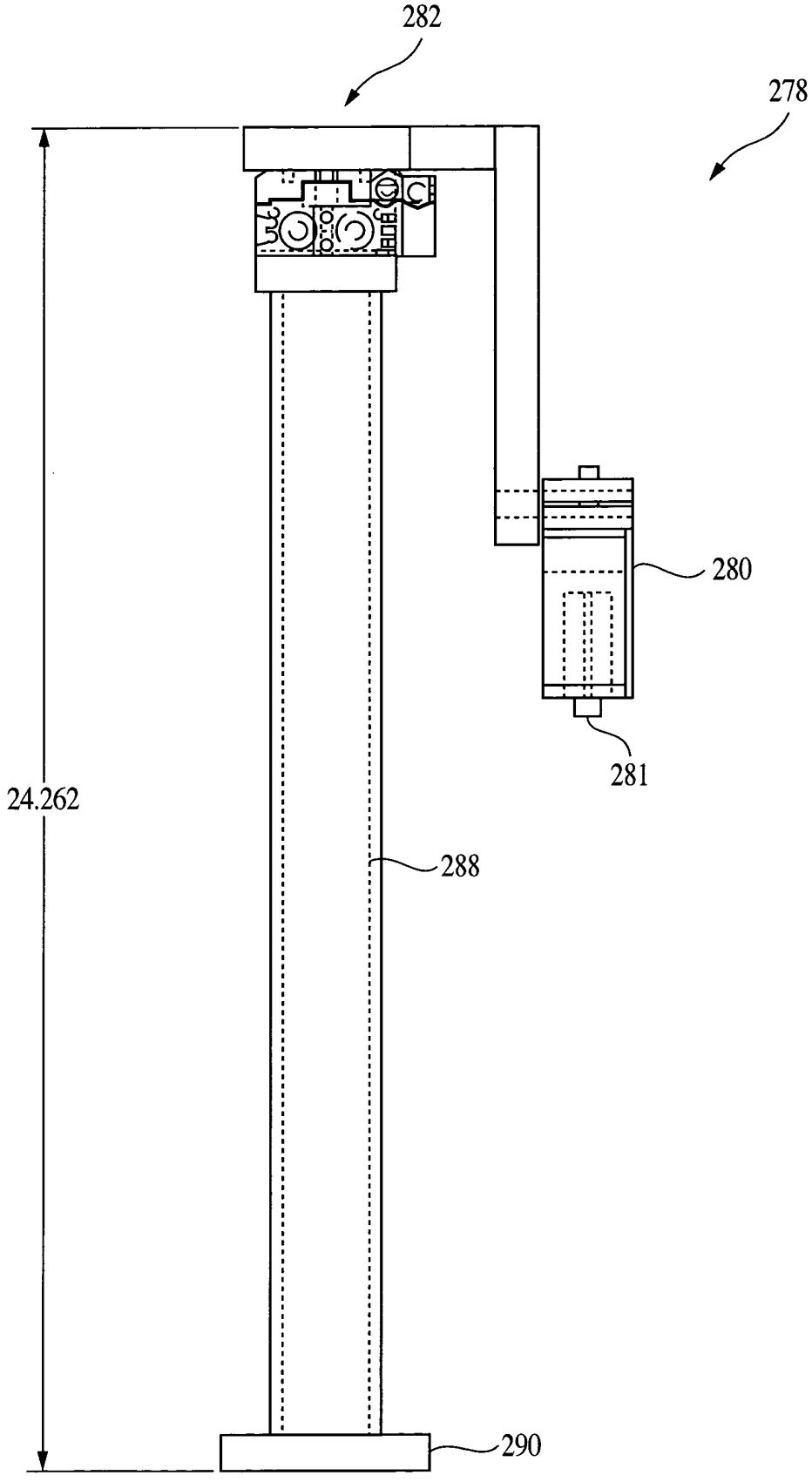

FIG. 13B

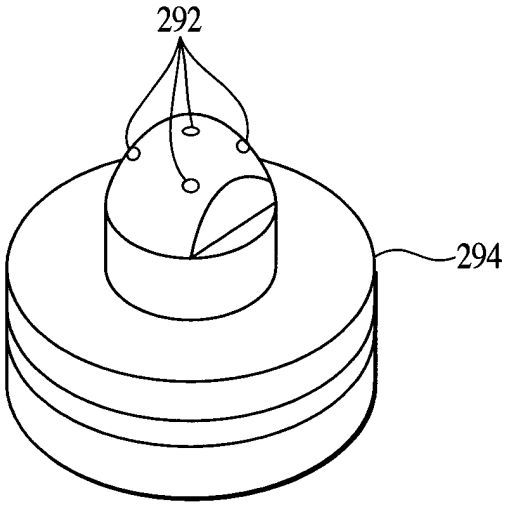

FIG. 13C

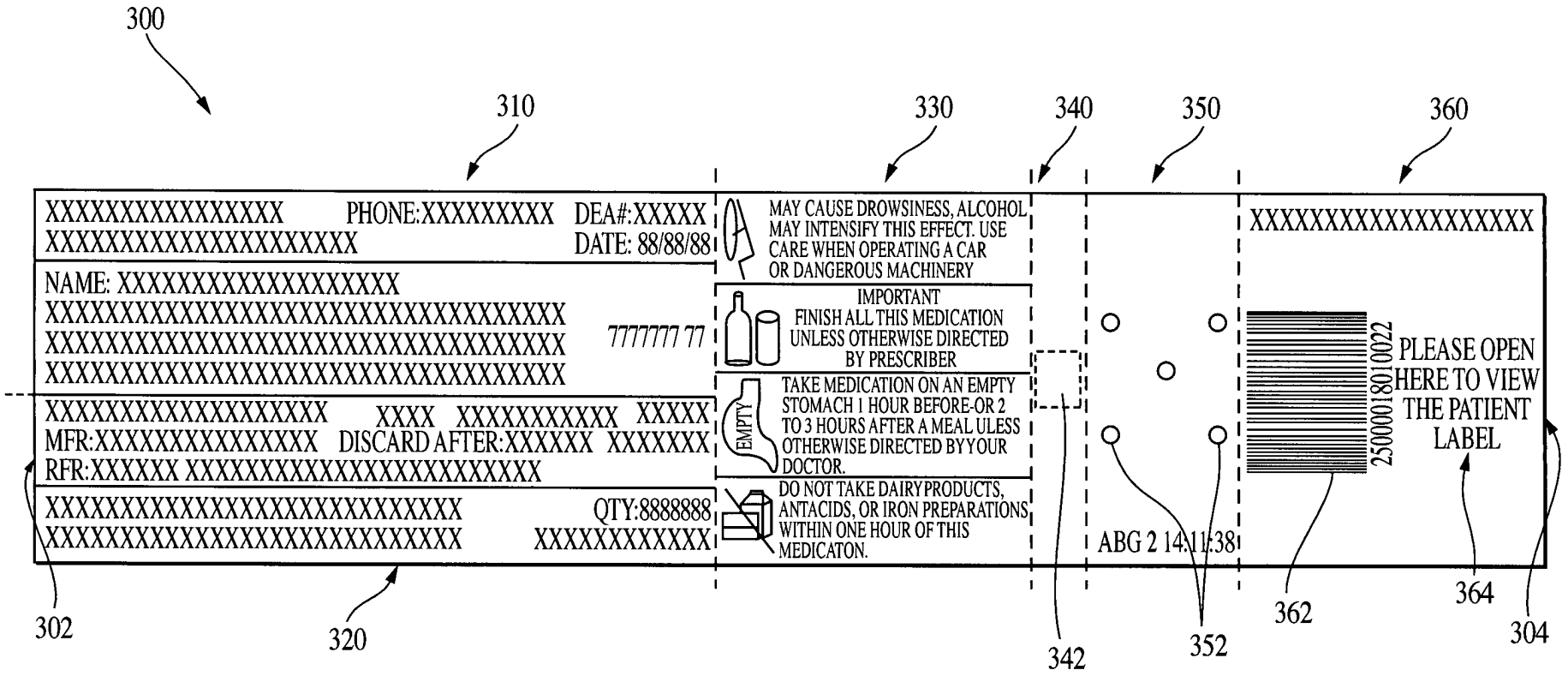
300
310
330
340
350
360
XXXXXXXXXXXXXXX PHONE:XXXXXXXXX DEA#:XXXXX
XXXXXXXXXXXXXXXXXXX DATE: 88/88/88
NAME: XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
7777777 77
XXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXX XXXXX
MFR:XXXXXXXXXXXXXX DISCARD AFTER:XXXXXX XXXXXXX
RFR:XXXXXX XXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXX QTY:8888888
XXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX
MAY CAUSE DROWSINESS, ALCOHOL MAY INTENSIFY THIS EFFECT. USE CARE WHEN OPERATING A CAR OR DANGEROUS MACHINERY
IMPORTANT
FINISH ALL THIS MEDICATION UNLESS OTHERWISE DIRECTED BY PRESCRIBER
EMPTY
TAKE MEDICATION ON AN EMPTY STOMACH 1 HOUR BEFORE-OR 2 TO 3 HOURS AFTER A MEAL ULESS OTHERWISE DIRECTED BY YOUR DOCTOR.
DO NOT TAKE DAIRY PRODUCTS, ANTACIDS, OR IRON PREPARATIONS WITHIN ONE HOUR OF THIS MEDICATON.
ABG 2 14:11:38
XXXXXXXXXXXXXXXXXX
25000018010022
PLEASE OPEN HERE TO VIEW THE PATIENT LABEL
302
320
342
352
362
364
304

FIG. 14

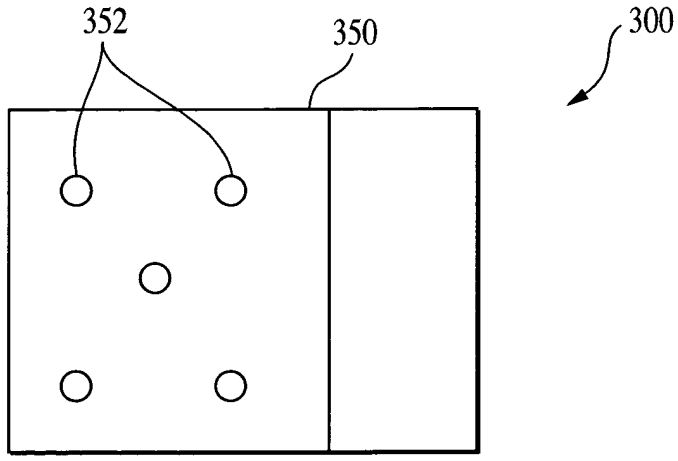

FIG. 15A

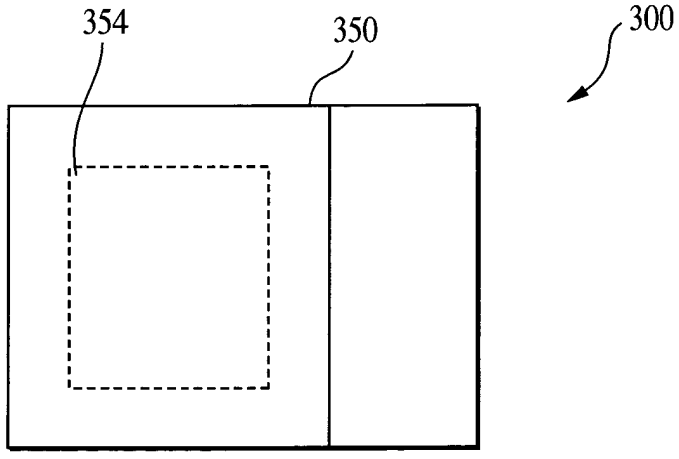

FIG. 15B

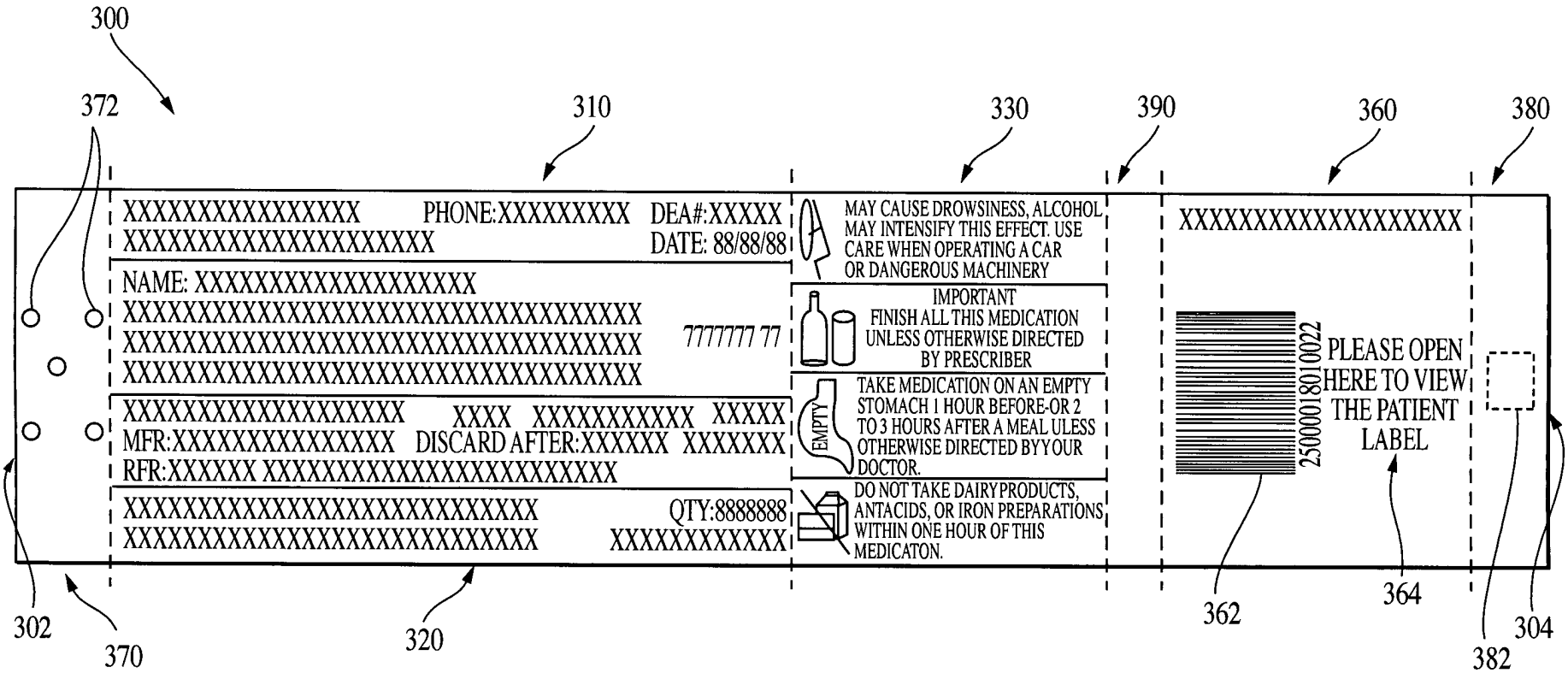
300
372
310
330
390
360
380
XXXXXXXXXXXXXXXX PHONE:XXXXXXXXX DEA#:XXXXX
XXXXXXXXXXXXXXXXXXXX DATE: 88/88/88
NAME: XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
7777777 77
XXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXX XXXXX
MFR:XXXXXXXXXXXXXX DISCARD AFTER:XXXXXX XXXXXX
RFR:XXXXXX XXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXX QTY:8888888
XXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX
MAY CAUSE DROWSINESS, ALCOHOL MAY INTENSIFY THIS EFFECT. USE CARE WHEN OPERATING A CAR OR DANGEROUS MACHINERY
IMPORTANT
FINISH ALL THIS MEDICATION UNLESS OTHERWISE DIRECTED BY PRESCRIBER
EMPTY
TAKE MEDICATION ON AN EMPTY STOMACH 1 HOUR BEFORE-OR 2 TO 3 HOURS AFTER A MEAL ULESS OTHERWISE DIRECTED BYYOUR DOCTOR.
DO NOT TAKE DAIRY PRODUCTS, ANTACIDS, OR IRON PREPARATIONS WITHIN ONE HOUR OF THIS MEDICATON.
XXXXXXXXXXXXXXXXXX
25000180100022
PLEASE OPEN HERE TO VIEW THE PATIENT LABEL
302
370
320
362
364
382
304

FIG. 15C

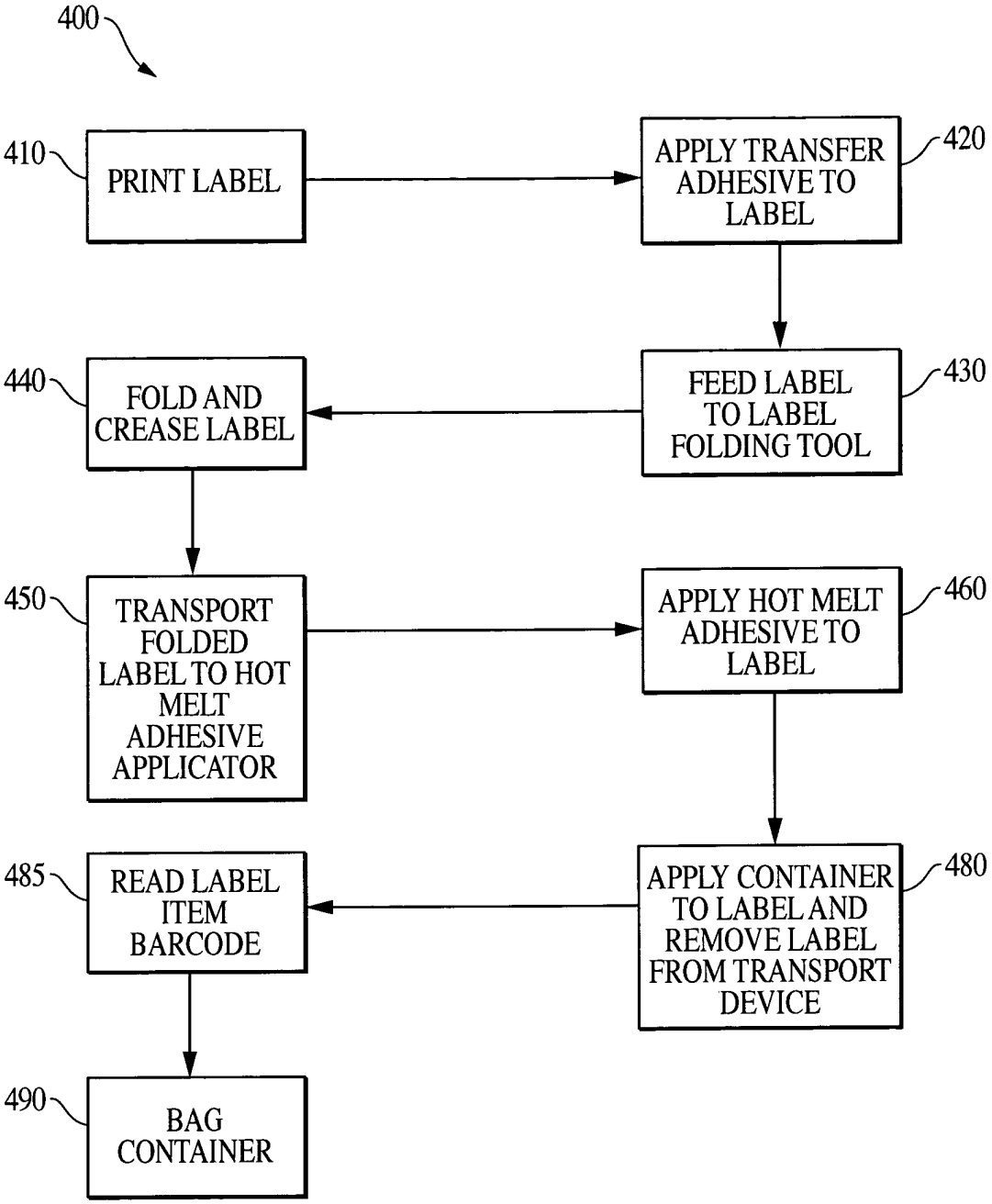
400
410
PRINT LABEL
420
APPLY TRANSFER ADHESIVE TO LABEL
430
FEED LABEL TO LABEL FOLDING TOOL
440
FOLD AND CREASE LABEL
450
TRANSPORT FOLDED LABEL TO HOT MELT ADHESIVE APPLICATOR
460
APPLY HOT MELT ADHESIVE TO LABEL
480
APPLY CONTAINER TO LABEL AND REMOVE LABEL FROM TRANSPORT DEVICE
485
READ LABEL ITEM BARCODE
490
BAG CONTAINER

FIG. 16

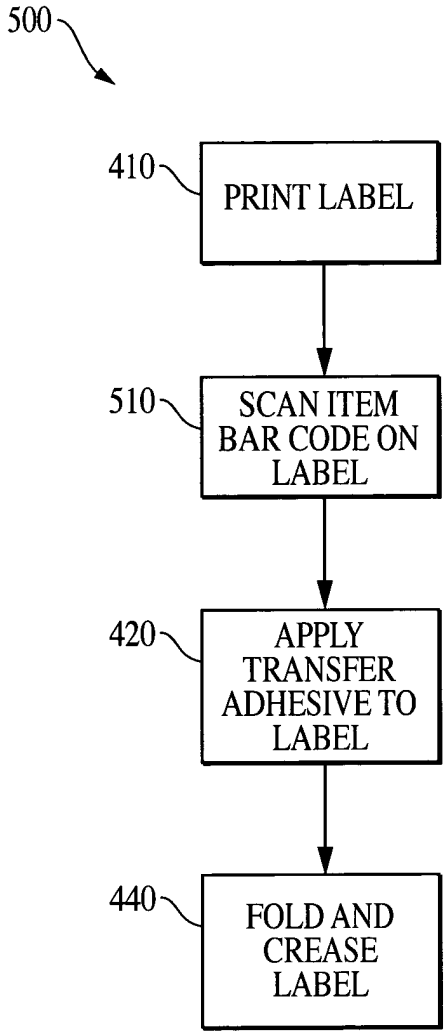
500
410
PRINT LABEL
510
SCAN ITEM BAR CODE ON LABEL
420
APPLY TRANSFER ADHESIVE TO LABEL
440
FOLD AND CREASE LABEL

FIG. 17

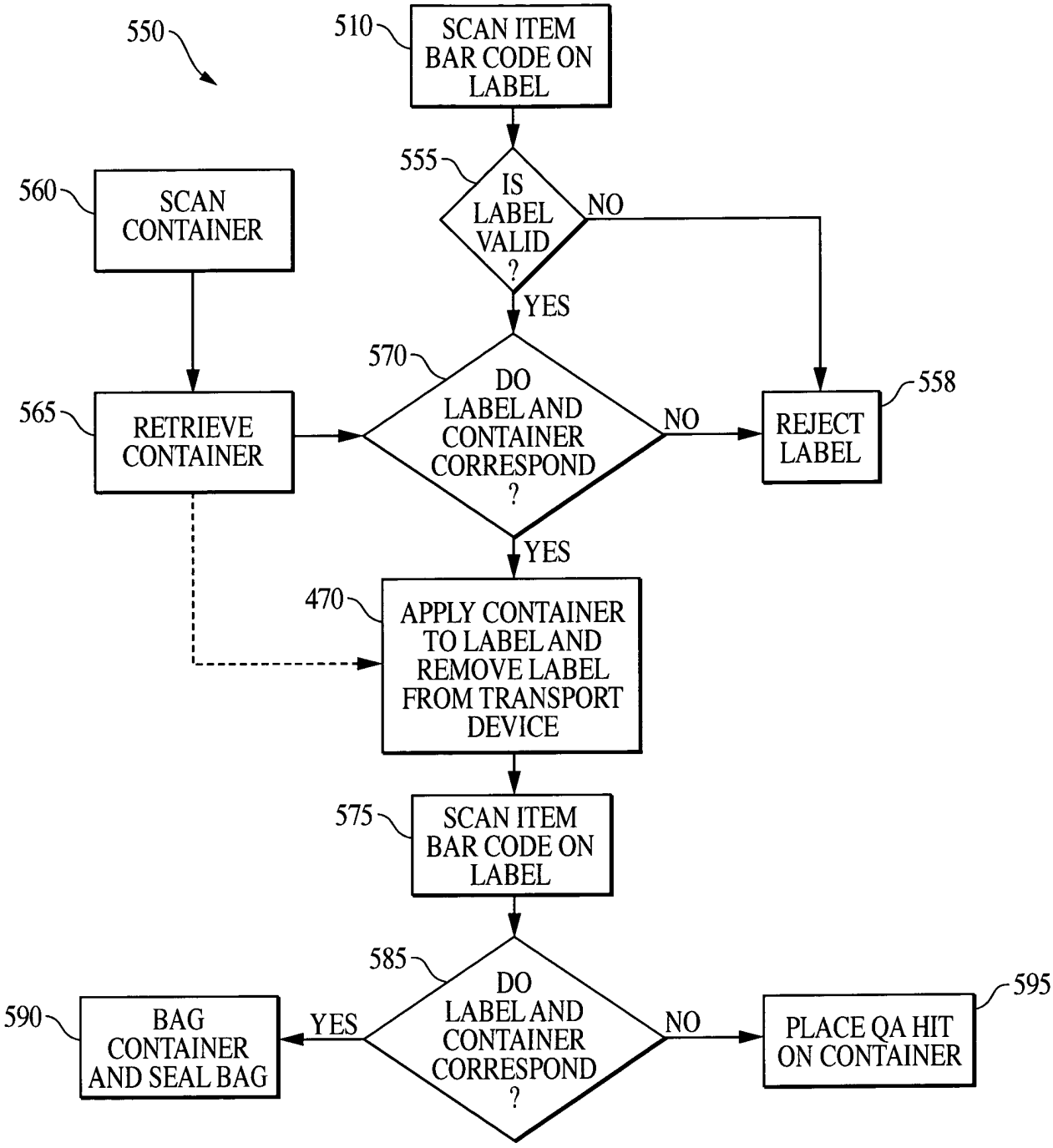
550
510
SCAN ITEM BAR CODE ON LABEL
555
IS LABEL VALID ?
NO
YES
560
SCAN CONTAINER
570
DO LABEL AND CONTAINER CORRESPOND ?
NO
558
REJECT LABEL
565
RETRIEVE CONTAINER
YES
470
APPLY CONTAINER TO LABEL AND REMOVE LABEL FROM TRANSPORT DEVICE
575
SCAN ITEM BAR CODE ON LABEL
585
DO LABEL AND CONTAINER CORRESPOND ?
595
590
BAG CONTAINER AND SEAL BAG
YES
NO
PLACE QA HIT ON CONTAINER

FIG. 18

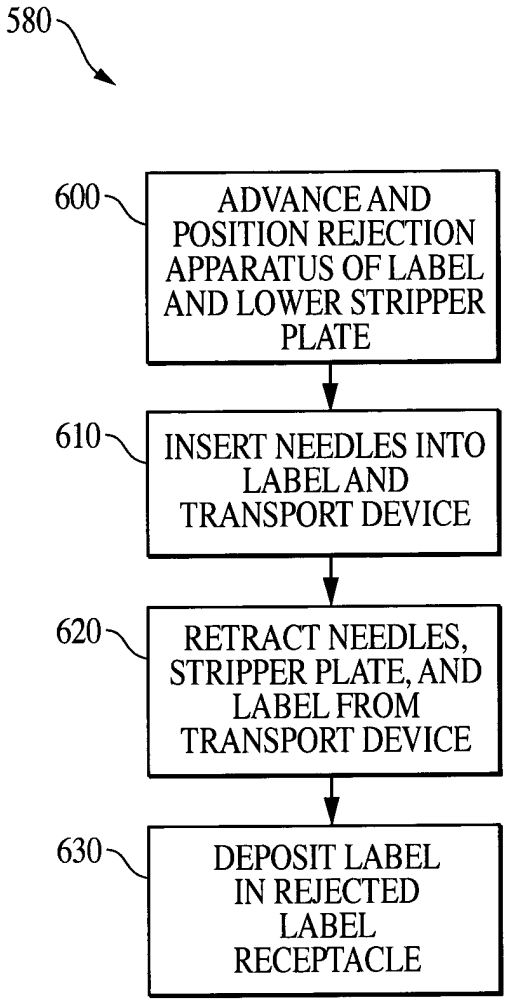
580
600
ADVANCE AND POSITION REJECTION APPARATUS OF LABEL AND LOWER STRIPPER PLATE
610
INSERT NEEDLES INTO LABEL AND TRANSPORT DEVICE
620
RETRACT NEEDLES, STRIPPER PLATE, AND LABEL FROM TRANSPORT DEVICE
630
DEPOSIT LABEL IN REJECTED LABEL RECEPTACLE

FIG. 19

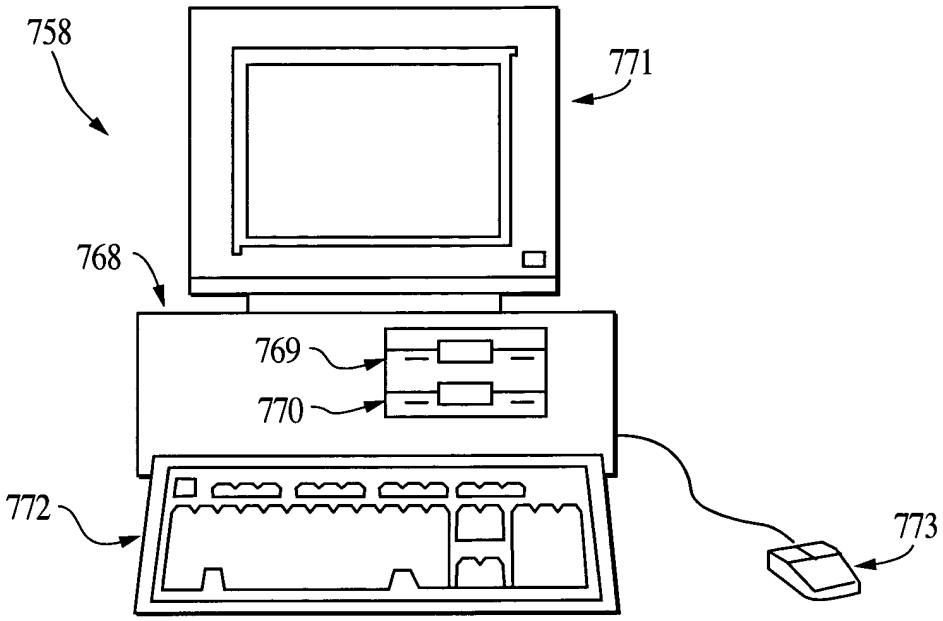
758
771
768
769
770
772
773

FIG. 20

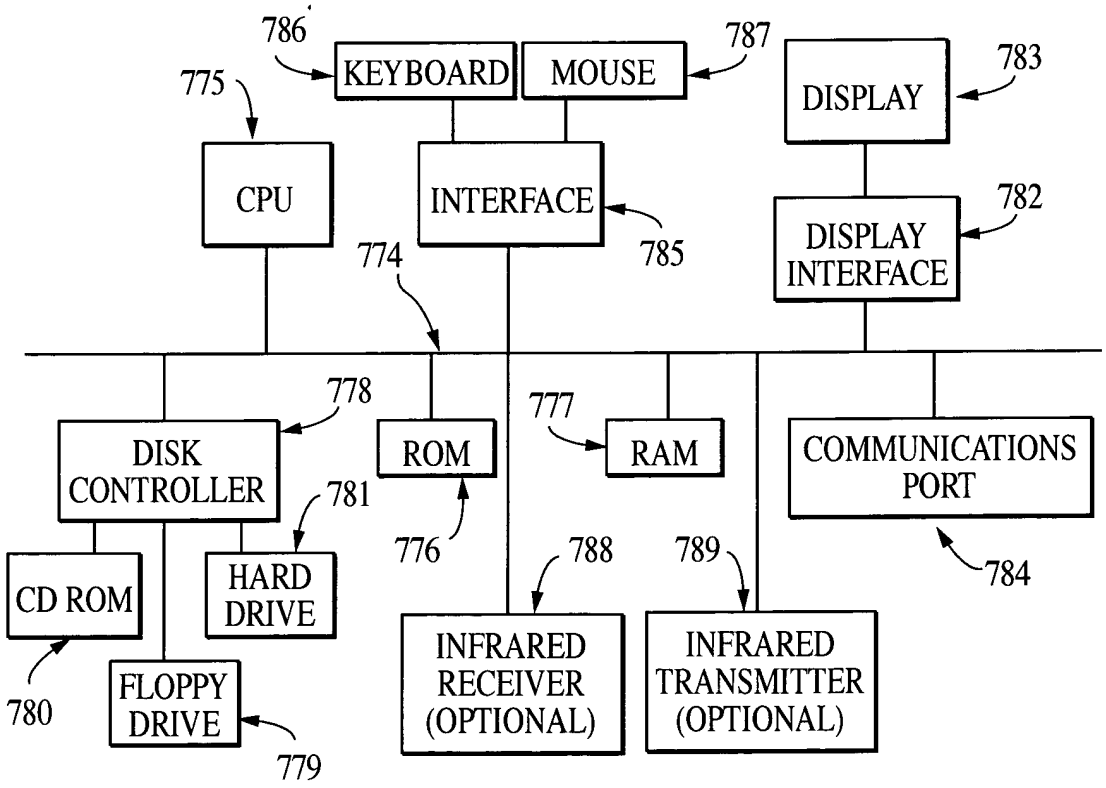
786
KEYBOARD
MOUSE
787
775
CPU
INTERFACE
785
774
DISPLAY
783
DISPLAY INTERFACE
782
778
DISK CONTROLLER
781
ROM
776
777
RAM
COMMUNICATIONS PORT
784
CD ROM
780
HARD DRIVE
FLOPPY DRIVE
779
788
INFRARED RECEIVER (OPTIONAL)
789
INFRARED TRANSMITTER (OPTIONAL)

FIG. 21

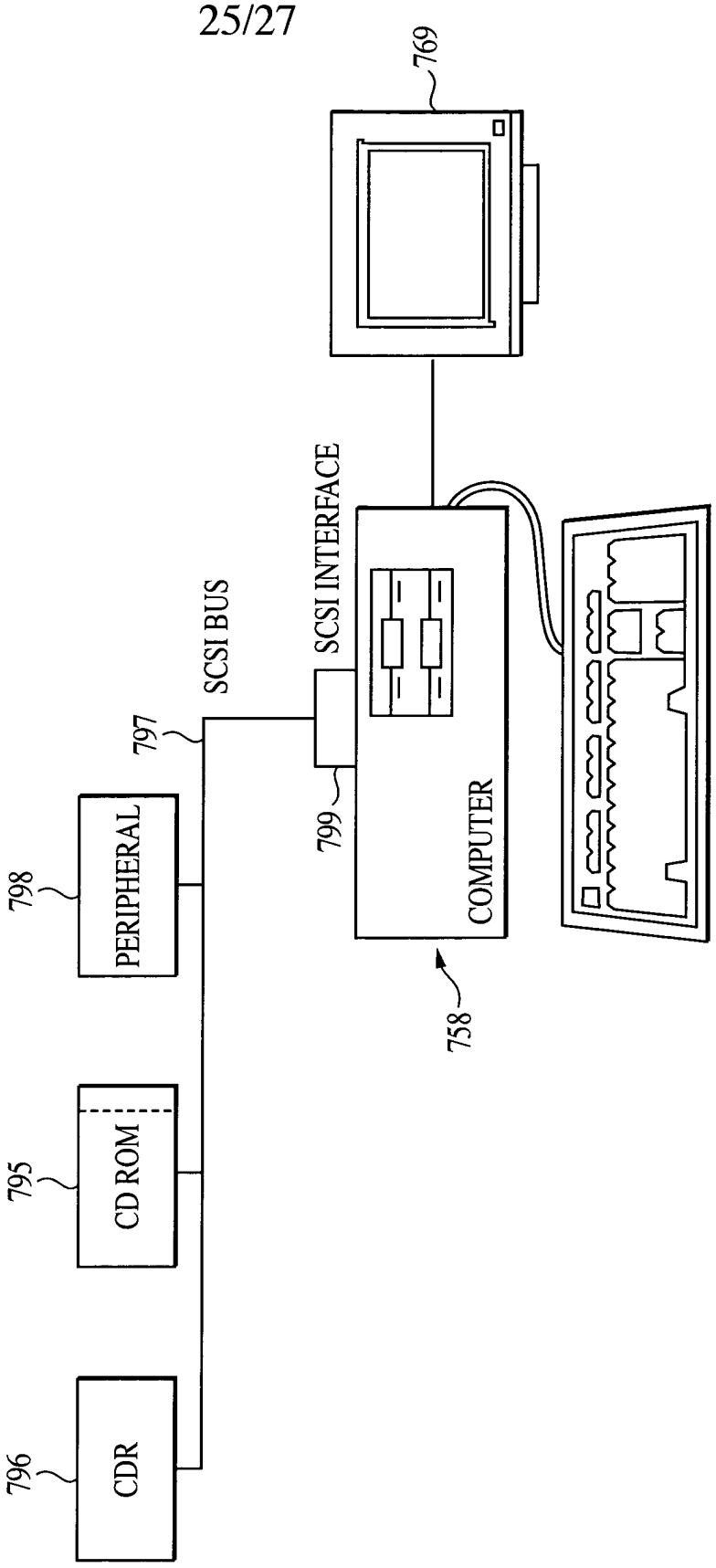
769
SCSI INTERFACE
SCSI BUS
797
799
COMPUTER
758
798
PERIPHERAL
795
CD ROM
796
CDR

FIG. 22

FIELD	SIZE	FORMAT	CONTENTS/DESCRIPTION
ITEM IDENTITY	14	N	UNIQUE IDENTITY OF THE ITEM TO BE DISPENSED
ITEM BARCODE	16	A	BARCODE TO BE SCANNED ON PICK ITEM
PRIMARY CHANNEL FOR PICK	8	N	THE CHANNEL TO PICK THE ITEM FROM
EXPIRATION DATE FOR PRIMARY	8	D	(EX. YYYYMMDD)
SECOND CHANNEL FOR PICK	8	N	THE CHANNEL TO PICK THE ITEM FROM, IF THE FIRST CHANNEL IS EMPTY.
EXPIRATION DATE FOR SECONDARY	8	D	(EX. YYYYMMDD)
PATIENT NAME	41	X	CONCATENATED FIRST AND LAST PATIENT NAME
Rx NUMBER	10	X	PRESCRIPTION NUMBER
PHARMACY LOCATION NUMBER	2	N	PHARMACY LOCATION
PATIENT INSTRUCTIONS LINE 1	48	X	DOSING INSTRUCTIONS
PATIENT INSTRUCTIONS LINE 2	48	X	DOSING INSTRUCTIONS
PATIENT INSTRUCTIONS LINE 3	48	X	DOSING INSTRUCTIONS
PRESCRIBERS NAME AND TITLE	25	X	PRESCRIBER NAME (CONCATENATION OF TITLE STRING AND DOCTOR LAST NAME)
CHIEF PHARMACIST	14	X	NRx CHIEF PHARMACIST
MEDICINE NAME	29	X	DRUG NAME
MEDICINE MANUFACTURER	29	X	DRUG MANUFACTURER
MEDICINE STRENGTH	7	X	DRUG STRENGTH
QUANTITY	5	N	COUNT OF PILLS/ITEMS
CURRENT DATE	8	D	(EX.YYYYMMDD)
BOTTLE NUMBER LITERAL	16	X	DESCRIPTION OF BOTTLE NUMBER WITHIN THE Rx, FORMAT 'BOTTLE: XX OF YY'

APPENDIX A-1

GENERIC MESSAGE	53	X	E.G. "GENERIC SUBSTITUTION MADE FOR XXXXXXXXX" (CONCATENATED WITH MEDICINE NAME OF BRAND DRUG)
GRAPHICS FILE NAME #1	3	N	NUMERIC VALUE INDICATING AUXILIARY LABEL TO PRINT
GRAPHICS FILE NAME #2	3	N	NUMERIC VALUE INDICATING AUXILIARY LABEL TO PRINT
GRAPHICS FILE NAME #3	3	N	NUMERIC VALUE INDICATING AUXILIARY LABEL TO PRINT
GRAPHICS FILE NAME #4	3	N	NUMERIC VALUE INDICATING AUXILIARY LABEL TO PRINT
TABLET ID	15	X	
MESSAGE FIELD 1	59	X	LABEL MESSAGE
MESSAGE FIELD 2	59	X	LABEL MESSAGE
PHARMACY NAME	35	X	PHARMACY NAME
PHARMACY ADDRESS	50	X	CONCATENATED ADDRESS, CITY, STATE AND ZIP
CUSTOMER SERVICE PHONE NUMBER	14	X	FORMATTED PHONE NUMBER: "(nnn) nnn-nnnn"
DEA NUMBER	9	X	
LANGUAGE FLAG	1	N	THE LANGUAGE TO USE FOR THE LABEL PRINTING
REFILL MESSAGE FIELD 1	11	X	STRING DESCRIBING NUMBER OF REFILLS REMAINING ON THIS Rx: "yyy REFILLS" OR "NO REFILLS"
REFILL MESSAGE FIELD 2	20	X	STRING DESCRIBING THE DATE AFTER WHICH A REFILL MAY BE ORDERED: "ORDER AFTER mm/dd/yy" OR A STRING CONTAINING SPACES

APPENDIX A-2